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Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C.

In re:

Services

Implementation of Sections 3(n)) and 332 of the Communications Act) GN Docket No. 93-252 Regulatory Treatment of Mobile)

To: The Commission

REPLY COMMENTS OF

SOUTHEASTERN SMR ASSOCIATION AND SMR OPERATORS IN IDAHO, SOUTH CAROLINA, TEXAS, AND CALIFORNIA

Southeastern SMR Association
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Partnership
Teton Communications Inc.
South Carolina Communications
Limited Partnership
Advanced Electronics
East Texas Communications
Limited Partnership
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SUMMARY OF ARGUMENT

Nextel's proposal to relocate by August 10, 1995, the entire fleet/dispatch market to as yet unspecified frequencies in smaller markets where Nextel has not acquired the traditional SMR operators, is completely self-serving and contrary to the public interest, for the following reasons, among others:

- 1. Insufficient spectrum is available in the proposed bands to relocate existing SMR users effectively. A market survey is attached which demonstrates spectrum unavailability.
- 2. "Retuning" is impossible, inefficient, and inadequately states the problems presented. Many units would have to be substantially or completely replaced by more expensive equipment that existing customers do not want.
- 3. Traditional SMR service will be destroyed by Nextel's proposal, which would substantially lessen competition, including price competition and result in a net loss of jobs.
- 4. Substantial frequency warehousing by wide-area licensees has tied up valuable spectrum which existing SMR operators need to expand system capacity.
- 5. Implementation of Nextel's proposal would permit it to further dominate and monopolize the SMR service and product markets.
- 6. Nextel's proposal is inconsistent with the Communications
 Act and Congressional intent to enhance competition. It would
 eviscerate the 3-year private radio grandfathering provision, among
 others.

7. Nextel's proposal is anti-competitive. It would effectively eliminate the traditional SMR industry as a competitive force in the mobile radio field, consolidate the fleet/dispatch market in one in each large market, and would reduce the number of competitive equipment suppliers in the SMR equipment market.

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C.

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In re:

To: The Commission

REPLY SMR ENTREPRENEURS OF

SOUTHEASTERN SMR ASSOCIATION AND SMR OPERATORS IN IDAHO, SOUTH CAROLINA, TEXAS, AND CALIFORNIA

Southeastern SMR Association ("Association"), representing SMR operators in North Carolina, South Carolina, and southern Virginia; Idaho Communications Limited Partnership ("ICLP") Boise, Idaho; Teton Communications Inc. ("Teton"), Idaho Falls, Idaho; South Carolina Communications Limited Partnership ("SCCLP") Columbia, South Carolina; Advanced Electronics, Gardena, California; East Texas Communications Limited Partnership ("ETLP") Longview, Texas; and John Mitchell Company ("Mitchell") Los Angeles, California; (collectively the "SMR Entrepreneurs") hereby file these comments in reply to the "refarming" proposal initiated by NEXTEL in this proceeding in response to the Commission's Further Notice of Proposed Rule Making ("NPRM") in this Docket (released May 20, 1994).

I. INTRODUCTION

The Southeastern SMR Association ("Association") represents fourteen SMR operators whose systems cover most of North Carolina and parts of South Carolina and Virginia. See Appendix A. The Association was formed for the purpose of monitoring and promoting the business of its members before various state and federal agencies. The Association's members serve customers using approximately 8500 mobile units in various medium sized and rural markets.

ICLP owns and manages an SMR system comprised of approximately 112 SMR channels which serves approximately 3000 mobile units in the Boise, Idaho BTA Market $118.\frac{1}{}$ This system has been in operation and development for over twenty years, and is the largest provider of SMR services in the Boise BTA market.

SCCLP's SMR business has been in operation for over ten (10) years, and serves approximately 1400 mobile units in Columbia and Greenville, South Carolina (BTA Markets 91 and 63).

ETLP's owned and managed system operates in the area from east of the Houston BTA to Louisiana, and serves approximately 2300 mobile units. This predominantly small city and rural area became wait-listed at the end of 1993 as a result of the unprecedented increase in the filing of speculative, application mill

References to Basic Trading Area (BTA) and the larger Metropolitan Trading Area ("MTA") markets throughout this Reply refer to the Rand McNally "Commercial Atlas," (125th Ed., 1994) at p. 38. The 1994 Commercial Atlas designates the same BTA and MTA markets as the 1992 Atlas, on which the FCC based its PCS market rules. Number references are to market size. <u>Id.</u> at p. 44.

applications and "wide-area" applications seeking to warehouse SMR frequencies without constructing for a five year period.

Teton Communications owns and manages an SMR system serving approximately 3000 mobile units in the Idaho Falls and Pocatello Idaho BTAs.

Mitchell holds licenses for and manages 40 SMR channels at seven (7) sites in the Los Angeles BTA Market No. 2. Mitchell serves approximately 5100 mobile units. Advanced Electronic owns or manages SMR systems covering the Los Angeles, Santa Barbara, and San Diego BTAs, including the counties of Los Angeles, Santa Barbara, Ventura, Kern, Orange, San Bernardino, Riverside, and San Diego, and provides service to 1800 fleet and dispatch mobile units. Advanced also operates RCC and MDS systems in the same areas.

All the SMR Entrepreneurs provide interconnected trunked SMR service via traditional transmitter based operations in their markets. The vast majority of frequencies operated or managed by the SMR Entrepreneurs are in the 861/865 MHz band, and the SMR Entrepreneurs would be directly affected by Nextel's proposal.

II. THE NEXTEL PROPOSAL

Nextel proposes that it be given the exclusive use of the 861-865 MHz band to establish a wide-area "ESMR" system which would compete directly for customers with the cellular telephone system.

Nextel proposes to "retune" existing SMR operators to "non-public"

safety channels (<u>i.e.</u>, those below channel 401)". $^{2/}$ Nextel does not specify what other vacant frequencies are available for reassignment, but instead proposes that the wide-area operator would privately choose the frequencies to which current operators would be relocated, without FCC participation. $^{3/}$

In contrast, NABER proposes that this "retuning" be accomplished in the 856-860 MHz band, by having existing "wide area" operations give up spectrum in the band.

Nextel opposes giving up its own spectrum; Nextel wants to keep all its frequencies in the other bands:

Adoption of the ESMR block licensing, with the continued ability to utilize channels 1 - 400...would fulfill the Commission's Congressional mandate to create regulatory symmetry in the licensing of ESMRs... $\frac{4}{}$

In addition, Nextel opposes the proposed "cap" on the amount of spectrum it can own or control in any market. $\frac{5}{}$

Given this pre-emptive disagreement between the two proponents of creating the 861/865 spectrum block (Nextel and NABER) over how and where to relocate traditional SMR operators, it is important to discuss the existing market and spectrum problems in the 800 and 900 MHz SMR and mobile radio bands.

 $[\]frac{2}{}$ Nextel Comments at 19.

[&]quot;The ESMR licensee would bear all the retuning costs, including the identification of replacement channels... Id.

 $[\]frac{4}{}$ Id. at 21.

 $[\]underline{Id}$. at 26.

III. DESCRIPTION OF THE MARKET

A. <u>Customer Service Market</u>.

The SMR dispatch market is substantially distinct from the mobile telephone market. ⁶/ The SMR customer base is comprised substantially of construction contractors, heavy industrial and service-based companies including fleet dispatchers who must be in contact with many vehicles at once, or must maintain periodic contact throughout the day with many vehicles.

While the FCC's rule change in the mid-1980s to permit SMR interconnection with the Public Switched Telephone Network ("PSTN") made SMR more attractive to fleet and dispatch customers and spurred the growth and utility of the SMR industry, the predominant users of traditional SMR service continue to be business, industrial, and fleet users. This is consistent with national statistics. The FCC observed that at the end of 1992, there were 295,000 interconnected SMR mobile units in service and 1,048,000 dispatch SMR mobile units. NPRM at 17, n. 51. Interconnected units represented approximately 22% of the SMR market.

The distribution of fleet/dispatch and interconnected customers is as follows on the SMR Entrepreneurs' systems:

System	Fleet/Dispatch	Interconnect2/
Advanced Mitchell	99.8% 98.5%	0.2% 1.5%
SCCLP	75%	25%

The FCC recently has confirmed that the "dispatch marketplace" is a separate market. <u>Second Report and Order</u>, 9 FCC Rcd 1411, 1455 (1994).

^{2/} Based on air-time use or mobile units.

System	Fleet/Dispatch	Interconnect8/
SE Assn. 9/	70%	30%
Teton	70%	30%
ETLP	63%	37%
ICLP	20%	80% 10 /

Moreover, the price of airtime for SMR fleet/dispatch and interconnect service is, on average, 25% to 40% less than that of competing cellular service in the various markets. The availability of low-cost dispatch/fleet and interconnected capability in the same unit makes the SMR service very attractive to these industrial and business customers. With the consolidation of the non-wireline cellular telephone industry into the hands of the Regional Bell Operating Companies ("RBOCs"), the large independent telephone companies, and a few non-wireline companies, the traditional SMR industry is the only significant group offering low-priced mobile voice services.

The SMR technology and mobile units are tailored to meet the needs of this special market segment for low cost, wide-area service. SMR technology provides this by offering service from

Based on air-time use or mobile units.

 $[\]frac{9}{}$ 14 system average.

^{10/} Market size has an effect on the distribution of fleet/dispatch and interconnect customers. There is a higher percentage of fleet/dispatch users in the larger markets such as Los Angeles because there are more such businesses available in the larger markets desiring SMR service. Also, the cellular telephone systems were installed years earlier in the larger markets, permitting them to attract the pent-up demand for general mobile radio service. In Boise, for example, ICLP's SMR business had a four (4) year head start on the introduction of cellular service, and captured much of the pent-up demand for interconnected service. The dispatch/fleet market of potential customers is also much smaller in a market of Boise's size (BTA market 118).

single high-powered transmitters. As a result, the cost of the customer mobile equipment which must communicate with these relatively powerful transmitters, and the air time charges associated therewith, are substantially less than for traditional cellular systems. This is attractive to the industrial and business customers who must maintain a sizeable number of mobile units.

Because of the relatively high volume of use, the lower air time costs permitted under traditional SMR operations are attractive to such users. These users do not need the multi-cell handoff of a cellular system, and the corresponding higher air time charges associated with the more complex cellular technology.

Essentially, differences in cellular technology and price differences are decisional factors for many dispatch and fleet customers. Cellular service is available to these customers in the SMR Entrepreneur's markets. However, the customers find they do not need the extra technology built into the cellular system, and, most significantly, do not desire to pay for the higher air-time charges required by the more capital-intensive multi-cell cellular systems.

As a result, the traditional SMR operator serves a segment of the mobile radio market which has distinct needs and interests from the general cellular telephone user. Twelve days prior to its

 $[\]frac{11}{2}$ For example, in the Boise, ID market, SMR costs typically are one-third of cellular charges for similar amounts of air time. This is typical of other markets served by the Commenters.

Comments to this Commission, Nextel agreed with the SMR Entrepreneurs' description of the separate fleet/dispatch market:

The traditional SMR market, therefore, has been oriented largely to customers such as contractors, service companies and delivery services that have significant field operations and need to provide their personnel with the ability to communicate directly with one another, either on a one-to-one or one-to-many basis. $^{12/}$

However, Nextel disagrees whether this market is important enough to it for its particular corporate focus:

The broader market of businesses and individuals that are primarily interested in mobile telephone service has to date been largely beyond the reach of traditional SMR operators.

<u>Id</u>. Nextel wants to be the next competitor to cellular, and seeks to monopolize available SMR spectrum in the process. In order to accomplish its own individual corporate goals, Nextel has, for a number of years, embarked upon an effort to accumulate, through acquisition or rule making proceedings before the FCC, the small segment of the spectrum allocated for SMR service, and convert it from serving the specialized needs of the fleet/dispatch market, to accommodating mobile telephone use by the general public. 13/

B. The SMR Product Market.

The SMR product market and technology is substantially distinct from the cellular mobile telephone. SMR transmitters and

 $[\]frac{12}{}$ Nextel 10-K Annual Report, at 3 (Securities and Exchange Commission, June 8, 1994).

<u>13</u>/ <u>See</u>, <u>e.g.</u>, <u>800 EMSP Notice</u>, 8 FCC Rcd. 3950 (1993).

mobiles permit mobile-to-mobile direct calls and dispatch or fleet one-to-many calls without use of the PSTN, at substantial savings to the user. Cellular telephone technology does not provide this service; mobile to mobile calls are routed through the PSTN. SMR technology also permits one-to-many "fleet" communications on a single channel, thereby employing effective use of the spectrum at low cost to the user.

For example, a typical fleet user can program its fleet with a number of different codes, so that a business can communicate with mobiles used by the sales force, the service department, or all units through a general code. SMR mobile transmitters do not contain all the additional features built into cellular telephones, because this segment of the mobile market does not need or demand such uses. Furthermore, SMR mobile units do not have the capability to communicate with as many multiple frequencies as cellular telephones, or maintain the sophisticated communications with multiple transmitters that cellular telephones employ. These simpler technology adaptations are not limitations on the use of the spectrum or equipment, but are designed to serve the discreet needs of the customers.

It should be emphasized that the SMR Entrepreneurs desire at the earliest possible time to incorporate digital technology into their operations. The SMR Entrepreneurs' systems essentially are saturated, and the digital technology provides the only effective means for expanding capacity, continuing to provide quality service, and permitting system growth.

For example, under current analog technology, a twenty-channel SMR system in Boise, with an 80% dispatch/fleet customer base and 20% interconnect base can handle approximately 800 mobile units in order to give customers good service during the morning and afternoon peak periods. The FCC requires a minimum of 70 units per channel for loading under the current rules, which would require 1400 mobile units for a 20-channel system. Thus, by making available interconnected service, system capacity is effectively reduced below the FCC minimums, which were established when SMR was limited to fleet dispatch service.

Even if the FCC eliminates loading requirements for SMR, as it should under this Regulatory Parity docket, the SMR Entrepreneurs still are interested in expanding system capacity. With the untimely entry of wide-area waivers and application mill applicants into the market, the SMR Entrepreneur find their systems at capacity under existing analog technology, without having available additional frequencies for expansion.

In the past year and a half, peak hour saturation and the resulting "dropped calls" and system access problems have become issues of increasing concern to the SMR Entrepreneur' systems. In order to fulfill existing customer demands for service quality, and to continue to compete and grow, traditional SMR providers will incorporate digital technology into their operations upon its availability. Under the 3:1 additional capacity being experienced

in existing tests of digital equipment, 14/ traditional SMR operators will be eager to incorporate the new technology. In order to preserve economical service to existing customers who desire to keep existing equipment, the SMR industry will be looking for technology which permits the continuation of analog and digital communications side-by-side, just as the cellular industry currently is providing in its transition to digital technology.

IV. THERE IS INSUFFICIENT SPECTRUM TO IMPLEMENT NEXTEL'S PROPOSAL.

The FCC has recognized that current licensing in 800 MHz SMR might make it infeasible or contrary to the public interest to restructure the channel allocation scheme. Therefore, the FCC asked for comment on:

whether the amount of spectrum still available at 800 MHz is sufficient to support multichannel licensing on an MTA-wide basis, or whether imposing such a structure might actually impede the growth of wide area service. $^{15/}$

Nextel proposes to be the one licensee in each MTA for 71% of the channels allocated exclusively to SMR. $^{16/}$ However, Nextel is unable to identify sufficient available spectrum to which

SMR Entrepreneurs understand from equipment manufacturers that the original claims of efficiency gains of 6:1 or greater are not being realized in field tests, but are more in the range of a 3:1 gain.

 $[\]frac{15}{}$ NPRM at ¶ 32.

 $^{^{16/}}$ Nextel proposes to aggregate in one licensee the 200 exclusive SMR channels from 861/865, which is 71% of the 280 800 MHz channels assigned exclusively to SMR.

traditional SMR operators could be moved, and is unwilling to give up spectrum it owns or manages in the 856/861 MHz band as proposed by NABER. $^{17/}$

A. There Is Insufficient Spectrum in the 800 MHz Band to Relocate Traditional SMR Operators.

There is insufficient spectrum available in 800 MHz, as demonstrated below. Imposing a market-wide structure of the type Nextel proposes would not only impede wide area service, but would destroy the wide-area service <u>presently</u> being provided in the U.S. by traditional SMR operators.

For purposes of these comments, the SMR Entrepreneurs undertook to survey the FCC database for the 851-865 MHz band in the Boise market. 18 /

Within the 851/865 MHz band are the existing 200 channel SMR allocations (861/865 MHz); the 80 channel SMR allocations (a portion of the 856/860 band) and the allocations for Public Safety, General Category, Special Industrial, and Business Radio. The SMR Entrepreneur further focused on the 856/861 MHz band where NABER proposes to move traditional SMR operators.

It is significant that NABER reviewed the draft Nextel plan prior to the June 20 comment date, and presumably there were discussions between Nextel and NABER about the plan, as Nextel sought NABER's endorsement. See NABER Comments at 14. Nevertheless, Nextel did not endorse NABER's proposal that widearea operators give up frequencies in the 856/861 MHz band as a precondition of obtaining the 861/865 block.

 $^{^{18/}}$ The Boise ID market is a smaller market (BTA Market 118) which became wait-listed only this Spring under the current FCC rules.

The results of this survey indicate that the 856/861 MHz spectrum is almost entirely saturated from existing, granted licenses, or pending applications. See Appendix B. All SMR channels are licensed. There are a total of 50 vacant frequencies - 24 allocated to Business Radio and 26 allocated to Industrial uses.

In the 861/865 band allocated exclusively to SMR, all channels are licensed. See Appendix C. 152 channels are licensed to 22 licensees providing traditional SMR services through six (6) competing SMR systems. These 152 channels are constructed and operating, providing current service to the public.

The remaining 48 SMR channels in the 861/865 MHz band are licensed to three (3) ESMR applicants - Questar, Smart SMR, Inc., a subsidiary of Nextel, and Cencall (a trade name of OneCell), a Denver-based company. These 48 channels are unconstructed and are being warehoused under five-year construction waivers. 19/

Of these three supposedly separate ESMR system waivers, **Nextel** controls all three! Nextel's June 8, 1994 10-K filing with the Securities and Exchange Commission discloses that Nextel entered into agreements on April 29, 1994, and October 18, 1993,

^{19/} For example, Questar's license for five SMR channels, WPBJ643, was issued March 17, 1993, and should have been constructed by March 17, 1994. On March 17, 1994, Questar was granted a waiver under Section 90.629(c) of the rules allowing it five years to construct.

respectively, with Questar and OneComm, the parent of Cencall, to purchase all their SMR licenses! $\frac{20}{}$

In the 856/861 MHz band, Nextel has interests in a minimum of 42 channels licensed to its subsidiary, Smart SMR, Inc., or to Cencall, Motorola, and Questar, all of which Nextel controls or has purchase agreements, within 100 miles of the Boise coordinates. These are the frequencies which NABER wants Nextel to give up, and which Nextel wants to keep. 21/ In addition, in the 861/865 MHz band, Nextel has rights to a minimum of 48 channels in Boise, which it desires to keep.

The survey indicates that there are no SMR channels available to which to move SMR operators. There are only 50 channels scattered through the General Category, Industrial and Business band at 856/861 MHz, and a minimum of 152 SMR channels would have to be relocated in Boise. There are also some single-frequency channels available in the 851/856 MHz band allocated to Business and Industrial use, but not enough to accommodate the reallocation of the traditional SMR operators in the 861/865 band. Many of the 150 General Category channels commencing with 851 MHz in Boise have been applied for by various individuals seeking to operate them as SMR systems under a series of "application mill" type filings, leaving those channels unavailable for relocating existing SMR operators licensed and operating on 861-865 MHz.

 $[\]frac{20}{}$ Nextel 10-K, at pp. 22-24. Nextel apparently is using OneComm to purchase Motorola's extensive SMR holdings. <u>Id</u>. at 24.

^{21/} Compare NABER Comments at 14; Nextel Comments at 21.

Cherry-picking single-frequency allocations from Industrial or Business spectrum, for example, would also create significant channel grouping problems for trunked operations, since the frequency allocations would not be uniform. The present channel-to-channel frequency spacing for SMR blocks is now 1 MHz apart from the next closest frequency. 22/ This permits higher throughput efficiencies (i.e., greater Effective Radiated Power) to permit operations at up to 1000 watts. The signals from all five transmitters used to transmit these frequencies are combined into a single antenna to maintain uniform signal distribution throughout the authorized service area. If SMR operators were forced to accept other base station frequencies that did not have these 1 MHz frequency relationships, the ability of the SMR operator to provide uniform service quality throughout the service area would be compromised significantly.

The spectrum availability situation is even worse in the larger markets, where Nextel already dominates ownership of the SMR frequencies. In Los Angeles, for example, the entire 806-866 MHz spectrum is absolutely saturated. While original SMR licensees were granted a 105-mile protection among the four very important mountain-top communications facilities in the LA market, including Advanced Communications' facility on Mount Wilson, the ESMR short-spacing and 40-mile short spacing permitted under the FCC's revised

For example, a typical five channel pair would involve the frequencies 861.5125; 862.5125; 863.5125; 864.5125, and 865.5125 MHz, expressed as 861/865.5125.

rules will substantially hinder any efforts to relocate traditional SMR operators to different frequencies in the 800 MHz range.

Reallocation of Business, Industrial and General Category channels to SMR operators would eliminate any excess capacity for Private Radio users, in favor of creating additional frequency blocks for a single commercial operator intent on creating another mobile telephone business.

B. Moving Traditional SMR Operators To The 900 MHz Band Is Infeasible and Not In The Public Interest.

The FCC has identified the partially vacant 900 MHz band as one particularly suited to the type of "block" assignment proposal made by Nextel:

In contrast to 800 MHz, the 900 MHz SMR band has not been extensively licensed, causing occupancy to remain relatively light....[W]e believe that the assignment of contiguous channels on a wide area-basis would allow licensees to create viable regional and national CMRS systems, providing needed voice and data communication services to a variety of end users. We seek comment on this approach.

NPRM at \P 34. Nextel can and should use the 900 MHz frequency blocks to establish its nationwide system since it already operates in the 900 MHz band:

The Company's [Nextel's] traditional SMR sales efforts are focused on loading the 900 MHz systems since the 900 MHz systems have more unused capacity than the 800 MHz systems and in anticipation of utilizing the 800 MHz channels for the Digital Mobile networks....[T] he costs of migrating customers off the 800 MHz systems for the implementation of Digital Mobile networks are reduced by emphasizing loading on the 900 MHz systems.

The negative short-term effects occur because the 900 MHz systems general lower revenues and profitability than the 800 MHz systems... 23

As the FCC has observed, the 900 MHz spectrum is relatively vacant, and lends itself to establishing "viable regional and national CMRS systems...". NPRM at ¶ 34. Nextel already has substantial holdings of 900 MHz licenses in those major markets where 900 MHz licenses have been issued, and the ESMR technology, still in development, Indeed, the very technical could be switched to that block. problems of which Nextel complains in this proceeding would not present themselves in the 900 MHz band because outside the top 50 MSAs the band presently is unassigned. $\frac{24}{}$ On the other hand, the spectrum is not suited to the relocation of 900 dispatch/fleet communications market. The 900 MHz frequencies are "narrowband", i.e., with 2.5 KHz modulation between channels, as opposed to 5 KHz modulation permitted in the 800 MHz SMR band. addition, channel spacing in the 900 MHz band is 12.5 Khz, compared with 25 KHz spacing in the 800 MHz SMR band. These narrow channel spacings and modulation parameters hinder the effective combination of 900 MHz frequencies for trunking purposes for dispatch/fleet

Nextel 10-K at 5. Nextel's statements show that it has no present intention of servicing the existing fleet/dispatch system on the 800 MHz channels it seeks to obtain through its proposal in this proceeding, but that it is intent on migrating those users to the 900 MHz band. Its statements on June 8, 1994 to the SEC are inconsistent with the proposal has made herein to the FCC, namely, that the fleet/dispatch market should be accommodated in "channels below 401 MHz." Nextel Comments at 19. Nextel has adopted on a contrary corporate policy in its own marketplace.

 $[\]frac{24}{}$ See Public Notice, Private Land Mobile Application Procedures for Spectrum in the 896-901 MHz and 935-940 MHz Bands, 1 FCC Rcd. 543 (1986).

use, and substantially reduce the quality of service. There would have to be a complete change-out of <u>all</u> transmission and mobile unit equipment if traditional SMR systems were relocated to the 900 MHz band, a very uneconomical and expensive undertaking.

The SMR Entrepreneur' experience is that existing fleet/dispatch customers resist moving to 900 MHz channels for this reason. If traditional SMR operators were forced to move to the 900 MHz band, many existing customers would migrate back to Nextel's 800 MHz services. 25/ Nextel's "short-term" marketing strategy likely would encourage a competitor's existing customers to avoid the 900 MHz band and go with the "new" licensee in the 861/865 band who could still service the fleet/dispatcher's existing equipment without changeout.

There is another technical problem for 900 MHz channels which eliminates it as an option for 800 MHz SMR relocation. The transmit and receive frequencies for 861/865 MHz are separated by 45 MHz, permitting high-quality transmissions and reception over wide areas at low cost. To achieve the same quality of service, more expensive equipment would have to be installed at 900 MHz, for both transmit and receive equipment, thereby increasing substantially the cost of service.

 $^{^{25/}}$ This already is happening in Los Angeles, where dispatch/fleet customers forced by Nextel to move to the 900 MHz band choose instead to relocate to other 800 MHz operators with compatible existing equipment.

V. IT IS NOT IN THE PUBLIC INTEREST TO "RETUNE" EXISTING SMR OPERATIONS TO NEW FREQUENCIES

Nextel proposes that existing SMR equipment be "retuned" to new frequencies in the 800 MHz band below Channel 401; Nextel describes the proposal as an inexpensive and efficient one:

Retuning the traditional SMR operators from the 401-600 channel band to other channels will require minimal effort, no disruption of service, limited expense and will be transparent to the customers.

* * * *

The ESMR licensee would bear all the retuning costs, including the <u>identification of replacement channels</u>, any equipment <u>changes or replacements</u>, and any retuning required....The licensees should be given a relatively short period of time -- no longer than six months -- to negotiate an agreement.²⁶/

As to the first part of this assertion, nothing could be further from the truth. All of the SMR Entrepreneur herein surveyed their transmission and mobile equipment inventory in preparation for filing these comments. Mitchell Communications reported as follows:

It is estimated that at least 1200 mobile units [out of 5100, i.e., 24%] are incapable of being retuned to the 856-860 spectrum and an additional 3000 units would require extensive modification to operate on these frequencies. They may not be capable of covering all the lower frequency channels.

These radios are used by small and medium sized businesses and were acquired by them in the last 12-13 years. Given the current economic conditions in the greater Los Angeles market area, it has been our recent experience

 $[\]frac{26}{}$ Nextel comments at 14, 19.

that many of these radio users are very reluctant to make any changes to their existing radio systems at this time. Moreover, many of the existing customers have recently chosen to move their radios from the Nextel systems to our and other SMR operators systems in the 861-865 band when notified by Nextel that their system was being converted to ESMR and they must either move their radios or purchase new ESMR radios.²⁷/

The survey of other SMR Entrepreneurs reported that at least 20% of the existing customer equipment would have to be replaced. The Association reported that approximately half of all user equipment of its members could not be retuned, but would have to be replaced, with substantial customer resistance to bringing all mobile equipment into the shop for service.

In addition, much of the transmission infrastructure would have to be replaced, not just retuned. For example, the repeater units are basic narrow-band hardware and cannot simply be retuned. The antennas are tuned to the 861/865 MHz band, as are the combiners and preselectors. Also, the transmitter finals and receiver front ends will not retune. Changing frequencies will also require changing the associated software programs and support equipment which run the customer's dispatch systems.

Thus, the change of frequencies will not be "transparent to customers", as Nextel asserts. All customers, including those

Brackets added. As part of the installation of Digital Mobile service in Los Angeles, Nextel is attempting to move fleet/dispatch users to the 900 Mhz band. See Nextel's June 8, 1994 10-K filing with the SEC at 5. The fact that there is resistance to this program indicates that there will be substantial resistance among customers in Nextel's proposed 800 MHz frequency relocation.